03050109-210
(Saluda River)

General Description

Watershed 03050109-210 is located in Lexington and Richland Counties and consists primarily of the *Saluda River* and its tributaries from the Lake Murray dam to its confluence with the Broad River. The watershed occupies 65,535 acres of the Piedmont and Sandhill regions of South Carolina. The predominant soil types consist of an association of the Lakeland-Tatum-Georgeville-Appling series. The erodibility of the soil (K) averages 0.24; the slope of the terrain averages 7%, with a range of 2-25%. Land use/land cover in the watershed includes: 44.70% urban land, 9.08% agricultural land, 3.46% scrub/shrub land, 0.03% barren land, 39.05% forested land, 2.26% forested wetland (swamp), and 1.42% water.

This section of the Saluda River flows out of the Lake Murray dam and merges downstream with the Broad River to form the Congaree River in the City of Columbia. The lower Saluda River is protected under the S.C. Scenic Rivers Act. Rawls Creek (Yost Creek, Koon Branch), Lorick Branch, and Kinley Creek drain into the Saluda River near the City of Irmo. Juniper Creek and Long Creek (Pine Branch, Hamburg Branch) join to form Twelvemile Creek near the Town of Gilbert. Twelvemile Creek accepts drainage from Hogpen Branch, Fall Branch, and Boggy Branch before flowing through the Town of Lexington to accept the drainage of Fourteenmile Creek (Long Branch) and enter the river. Some of the ponds encountered by Twelvemile Creek include: Barr Lake, Gibsons Pond, Lexington Mill Pond, and Corley Mill Pond. Barr Lake (57 acres) is managed by the Lexington Wildlife Department and Lexington Mill Pond (32 acres) is used for water supply. Stoop Creek, Senn Branch, and Double Branch enter the Saluda River just prior to its confluence with the Broad River. There are a total of 77.0 stream miles in this watershed; the mainstem of this section of the Saluda River is classified TGPT* (*DO not less than daily average of 5 mg/l), and all other streams are classified FW.

Water Quality

Station #	Type	Class	Description
S-152	S	TPGT	SALUDA RIVER JUST BELOW LAKE MURRAY DAM
S-287	S/BIO	FW	RAWLS CREEK AT S-32-107
S-150	S	FW	LORICK BR AT POINT UPSTREAM OF JUNCTION WITH SALUDA R.
S-149	S	TPGT*	SALUDA RIVER AT MEPCO ELECTRIC PLANT WATER INTAKE
S-848	BIO	FW	FOURTEENMILE CREEK AT SR 28
S-052	BIO	FW	TWELVEMILE CREEK AT SR 106
S-294	P	FW	TWELVEMILE CREEK AT U.S. ROUTE 378
S-260	S	FW	KINLEY CREEK AT S-32-36 (ST. ANDREWS RD) IN IRMO
S-298	P	TPGT*	SALUDA RIVER AT USGS GAGING STATION, 1/2 MI BELOW I-20

***Saluda River* - There are three monitoring sites along this section of the Saluda River. At the upstream site (S-152), aquatic life uses are not supported due to dissolved oxygen and pH excursions, compounded by a significant decreasing trend in dissolved oxygen concentration and a significant increasing trend in total suspended solids. Significant decreasing trends in five-day biochemical oxygen demand and total phosphorus suggest improving conditions for these parameters. Recreational uses are fully supported and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter. At the midstream site (S-149), aquatic life uses are partially supported due to dissolved oxygen excursions, compounded by a significant decreasing trend in dissolved oxygen concentration. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions.**

At the downstream site (S-298), aquatic life uses are not supported due to occurrences of copper and zinc in excess of the aquatic life acute standards, compounded by a significant increasing trend in total suspended solids. A significant increasing trend in dissolved oxygen concentration suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions, but a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Rawls Creek (S-287) **- This stream was Class B until April, 1992. Aquatic life uses are not supported based on macroinvertebrate community data. In addition, there is a significant increasing trend in total suspended solids concentration. A significant increasing trend in dissolved oxygen concentration and significant decreasing trends in five-day biochemical oxygen demand and total phosphorus concentrations suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions, compounded by a significant increasing trend in fecal coliform bacteria concentration.**

Lorick Branch (S-150) **- This stream was Class B until April, 1992. Aquatic life uses are fully supported, but there are significant decreasing trends in dissolved oxygen concentration and pH. Significant decreasing trends in five-day biochemical oxygen demand and total phosphorus concentrations suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions.**

Kinley Creek (S-260) **- This stream was Class B until April, 1992. Aquatic life uses are not supported based on macroinvertebrate community data. In addition, there is a significant increasing trend in total suspended solids concentration. A significant increasing trend in dissolved oxygen concentration and significant decreasing trends in five-day biochemical oxygen demand and total phosphorus and total nitrogen concentrations suggest improving conditions for these parameters. Recreational uses are not supported due to fecal coliform bacteria excursions.**

Twelvemile Creek **- There are two monitoring sites along Twelvemile Creek, which was Class B until April, 1992. At the upstream site (S-052), aquatic life uses are partially supported based on macroinvertebrate community data. At the downstream site (S-294), aquatic life uses are not supported due to occurrences of copper and zinc in excess of the aquatic life acute standards, including a high concentration of zinc measured in 1995. In addition, there is a very high concentration of chromium measured in 1993, a significant decreasing trend in pH, and a significant increasing trend in total nitrogen concentration. A significant decreasing trend in total phosphorus concentration suggests improving conditions for this parameter. Recreational uses are partially supported due to fecal coliform bacteria excursions.**

Fourteen Mile Creek (S-848) **- Aquatic life uses are partially supported based on macroinvertebrate community data.**

Permitted Activities

Point Source Contributions

RECEIVING STREAM / *FACILITY NAME* / *PERMITTED FLOW @ PIPE (MGD)* / *COMMENT*	*NPDES#* / *TYPE* / *LIMITATION*
SALUDA RIVER **SCE&G/MCMEEKIN STEAM STATION** **PIPE #: 001 FLOW: M/R** **PIPE #: 002 FLOW: M/R**	**SC0002046** **MAJOR INDUSTRIAL** **EFFLUENT** **EFFLUENT**
SALUDA RIVER **SCE&G/SALUDA HYDRO STATION** **PIPE #: 001-004 FLOW: 0.835** **PIPE #: 005 FLOW: 0.420** **PIPE #: 006 FLOW: 0.007** **PIPE #: 007 FLOW: 0.0072** **PIPE #: 008 FLOW: 0.0086** **PIPE #: 009 FLOW: M/R**	**SC0002071** **MINOR INDUSTRIAL** **EFFLUENT** **EFFLUENT** **EFFLUENT** **EFFLUENT** **EFFLUENT** **EFFLUENT**
SALUDA RIVER **ALLIED FIBERS CORP./COLUMBIA PLANT** **PIPE #: 001 FLOW: 0.537** **WQL FOR DO**	**SC0003557** **MAJOR INDUSTRIAL** **WATER QUALITY**
SALUDA RIVER **PHILIPS COMPONENTS** **PIPE #: 001 FLOW: 0.715** **WQL FOR DO**	**SC0003425** **MAJOR INDUSTRIAL** **WATER QUALITY**
SALUDA RIVER **WOODLAND HILLS SD** **PIPE #: 001 FLOW: 0.29** **WQL FOR DO**	**SC0029475** **MINOR DOMESTIC** **WATER QUALITY**
SALUDA RIVER **BUSH RIVER UTIL., INC.** **PIPE #: 001 FLOW: 0.4** **WQL FOR DO**	**SC0032743** **MINOR DOMESTIC** **WATER QUALITY**
SALUDA RIVER **I-20 REGIONAL SEWER SYSTEM** **PIPE #: 001 FLOW: 0.8** **WQL FOR DO**	**SC0035564** **MINOR DOMESTIC** **WATER QUALITY**
SALUDA RIVER **FRIARSGATE SD/RAWLS CREEK** **PIPE #: 001 FLOW: 1.2** **WQL FOR DO**	**SC0036137** **MINOR DOMESTIC** **WATER QUALITY**
SALUDA RIVER **RIVERBANKS ZOOLOGICAL PARK** **PIPE #: 001 FLOW: 0.781** **WQL FOR DO**	**SC0037613** **MINOR INDUSTRIAL** **WATER QUALITY**
LORICK BRANCH **PHILIPS COMPONENTS**	**SC0003425** **MAJOR INDUSTRIAL**

PIPE #: 002 FLOW: M/R	**EFFLUENT**
KINLEY CREEK	**SC0003557**
ALLIED FIBERS CORP./COLUMBIA PLANT	**MAJOR INDUSTRIAL**
PIPE #: 002 FLOW: M/R	**EFFLUENT**
STORMWATER	
TWELVEMILE CREEK	**SC0026735**
TOWN OF LEXINGTON/COVENTRY WOODS	**MAJOR MUNICIPAL**
PIPE #: 001 FLOW: 1.95	**WATER QUALITY**
WQL FOR NH3-N, DO, TRC	
TWELVEMILE CREEK	**SC0034932**
VICTORIAN LAKES ESTATES	**MINOR COMMUNITY**
PIPE #: 001 FLOW: 0.07	**WATER QUALITY**
WQL FOR NH3-N, DO, TRC	
TWELVEMILE CREEK TRIBUTARY	**SC0026018**
OAK GROVE ELEMENTARY	**MINOR COMMUNITY**
PIPE #: 001 FLOW: 0.02	**WATER QUALITY**
WQL FOR NH3-N, DO, TRC, BOD5	
FOURTEENMILE CREEK	**SC0027162**
WATERGATE DEV./CAROLINA WATER	**MINOR DOMESTIC**
PIPE #: 001 FLOW: 0.294	**WATER QUALITY**
WQL FOR NH3-N, DO, TRC, BOD5	
FOURTEENMILE CREEK	**SC0034436**
LAKEWOOD UTILITIES	**MINOR COMMUNITY**
PIPE #: 001 FLOW: 0.2	**WATER QUALITY**
WQL FOR NH3-N, DO, TRC, BOD5	
FOURTEENMILE CREEK	**SC0043541**
TOWN OF LEXINGTON/WHITEFORD SD WWTP	**MINOR MUNICIPAL**
PIPE #: 001 FLOW: 0.3	**WATER QUALITY**
WQL FOR NH3-N, DO, TRC, BOD5	
STOOP CREEK	**SC0029483**
ALPINE UTILITIES, INC.	**MINOR DOMESTIC**
PIPE #: 001 FLOW: 2.0	**WATER QUALITY**
WQL FOR NH3-N, DO, TRC	

LAND APPLICATION FACILITY NAME	***PERMIT# TYPE***
SPRAY IRRIGATION	**ND0013587**
GILBERT ELEMENTARY SCHOOL	**MINOR COMMUNITY**
SPRAY IRRIGATION	**ND0067016**
LEXINGTON HIGH SCH./VOC.ED.CTR.	**MINOR COMMUNITY**
SPRAY IRRIGATION	**ND0067075**
WINDY HILL SD	**MINOR COMMUNITY**

Landfill Activities

SOLID WASTE LANDFILL NAME *FACILITY TYPE*	*PERMIT #* *STATUS*
SCE&G McMEEKIN STATION INDUSTRIAL	IWP-220 ACTIVE
ALLIED FIBERS CORP. INDUSTRIAL	IWP-143 ACTIVE
PHILLIPS COMPONENT INDUSTRIAL	IWP-216 INACTIVE
MUSTARD COLEMAN CONSTRUCTION INDUSTRIAL	NWP-001 ACTIVE

Mining Activities

MINING COMPANY *MINE NAME*	*PERMIT #* *MINERAL*
SOUTHEASTERN ASSOC. LEXINGTON COUNTY #1 MINE	1097-32 SAND
BORAL BRICK, INC. CORLEY MILL ROAD	0028-32 SHALE

Water Supply

WATER USER (TYPE) *WATERBODY*		*REGULATED CAPACITY (MGD)* *PUMPING CAPACITY (MGD)*
TOWN OF LEXINGTON (M) TWELVEMILE CREEK		3.0 6.6
CITY OF WEST COLUMBIA (M) SALUDA RIVER		6.0 13.0
PHILIPS COMPONENTS (I) SALUDA RIVER		7.5 5,208.3 GPM
ALLIED FIBERS CORP. (I) SALUDA RIVER	38.02	 ----- GPM

Growth Potential

There is a high potential for future residential and industrial development in this watershed. The area surrounding the Town of Lexington has grown rapidly during the past several years and the trend should continue. Several important highways run through the area including: SC 6, which runs from the Lake Murray dam south through the Town of Lexington, and US 1 and US 378, which run west from the City of West Columbia and intersects with Highway 6 in Lexington; I-20 also serves the area. The watershed's industrial corridor is one of the most economically attractive in the Midlands Area for future development. Once sewer is readily available, residential development is expected to increase and large industrial prospects can be attracted to the area.

The recent construction of a water plant on the shore of Lake Murray north of the Town of

Lexington, has made available a water supply sufficient to support development. The City of West Columbia and Lexington County have extended major water mains in the area. Non-industrial dischargers in this basin are targeted for elimination with effluent transported to the City of Cayce's WWTP through a regional system. Components of the regional system either have been constructed, are presently being constructed, or are presently being designed. This will decrease discharge levels into the lower portion of the Saluda River.